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| | Application No. | Applicant(s) |
| Notice of Allowability | 10/674,601 | DOMRES ET AL. |
| Notice of Allowability | Examiner | Art Unit |
| | Charlie Peng | 2883 |
| The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to | plication. If not included i will be mailed in due course. THIS |
| 1. A This communication is responsive to application filed on 30 | September 2003. | |
| 2. The allowed claim(s) is/are <u>1-38</u> . | | |
| 3. The drawings filed on <u>30 September 2003</u> are accepted by the Examiner. | | |
| 4. Acknowledgment is made of a claim for foreign priority una a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" | been received. been received in Application No. 11 cuments have been received in this of this communication to file a reply | national stage application from the |
| noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submit | itted. Note the attached EXAMINER | |
| INFORMAL PATENT APPLICATION (PTO-152) which give | es reason(s) why the oath or declara | |
| 6. CORRECTED DRAWINGS (as "replacement sheets") mus | | 0.40\ -4411 |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached1) ☐ hereto or 2) ☐ to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's | | Office action of |
| Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1, each sheet. Replacement sheet(s) should be labeled as such in the | | |
| DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I | sit of BIOLOGICAL MATERIAL r FOR THE DEPOSIT OF BIOLOGIC | must be submitted. Note the AL MATERIAL. |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. Interview Summary | ratent Application (PTO-152) (PTO-413), |
| 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 09/30/03, 03/14/05 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. ⊠ Examiner's Stateme | ent of Reasons for Allowance |
| | Brian Primary | l Healy Examiner |

DETAILED ACTION

Allowable Subject Matter

Claims 1 and 5 are allowed. The following is an examiner's statement of reasons for allowance. The applicant claims a stepped glass optical fiber having a large numerical aperture made of multiple components with different core and cladding compositions. The core and cladding compositions disclose both component (SiO₂, ZnO, PbO, etc.) and percentage weight ranges. U.S. Patent 4,573,762 to Joormann et al. teaches optical fibers with large numerical apertures formed from multicomponent glasses. However, the closest composition used to create an optical fiber taught by Joormann was Example 3, but it does not meet a PbO requirement in the core (none), a SiO₂ requirement in cladding (56.5% by weight), or a numerical aperture requirement of the optical fiber (0.40). The examiner finds no obvious motivation to combine other prior art in order to meet all three of these requirements. It is thus the examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious in combination with the rest of the limitations of the claim.

Claims 2-4 and 6-38 are allowed by virtue of being dependent upon the allowed independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. PGPub 2004/0109225 to Hu et al.;
- U.S. PGPub 2003/0072554 to Dohmen et al.
- U.S. PGPub 2002/0192421 to Jennings et al.;
- U.S. Patent 5,034,354 to Fine;
- U.S. Patent 4,871,230 to Yamashita et al.;
- U.S. Patent 4,453,962 to Harada et al.;
- U.S. Patent 4,277,270 to Krohn;
- U.S. Patent 4,264,131 to Sawamura et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 9 am - 6 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charlie Peng Charlie.Peng@uspto.gov

> Brian Healy Primary Examiner